



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,485	08/21/2006	Kevin J. Herbert	3003-1130-1	4238
<small>465</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			<small>7590</small> EXAMINER KIMBALL, JEREMIAH T	
			ART UNIT 3766	PAPER NUMBER
			MAIL DATE 05/27/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,485

Applicant(s)

HERBERT, KEVIN J.

Examiner

Jeremiah T. Kimball

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
3) ☒ Information Disclosure Statement(s) (PTO-893)
Paper No(s)/Mail Date 07/20/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. **Claims 3, 4, 5, 6, 19, and 21** objected to because of the typographical errors within lines 4, 2, 3, 2, 3, and 3 of the claims, respectively. Examiner assumes Applicant intended to state: (3) "capacitive sensors, **[and]** membrane switches," (4) "**[wherein the detector means]** defines," (5 and 6) "wherein the detector **[means]** comprises," (19) "for detecting **[the attitude]** of the casing," and (21) "means for storing data relating to **[the operation of the device, wherein detection by]** said detector means," respectively. Appropriate correction is required. See MPEP § 608.01.

Claim Rejections - 35 USC § 102

2. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-6, 8, 11, 14-16, 18, and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Locke et al. (US 2003/0208237), hereinafter Locke.**

4. In regards to **claim 1**, Locke discloses a defibrillator device (AED 10) comprising a casing (i.e. housing 12 and lid 14) containing electrical circuitry (i.e. power source 23, charging circuit 24, energy storage device 25, output circuit 26, and output electrodes 27 and 28) for generating in use a defibrillation voltage for application to a patient, a control system (i.e. controller 22) for controlling operation of said defibrillator device,

and a detector means (i.e. switch 21) which is associated with at least one region of said casing and which is responsive to at least one of touching by, handling by, or proximity of, an operator, said control system 22 being responsive in use to said detector means 21 to change the operational status of said defibrillator device from a first state (i.e. Off) to a second state (i.e. On) on detection of an operator (Abstract; Par. 19-22, 26-27, and 33-35; Fig. 1-3).

5. In regards to **claim 2**, Locke discloses wherein the casing includes a handle region 66 and said detector means 21 is associated with said handle 66 or an adjacent region on said casing 12/14 (Par. 33-35 and 38; Fig. 6 and 7).

6. In regards to **claim 3**, Locke discloses wherein said detector means is one or more selected from the group comprising microswitches, IR detectors, capacitive sensors, **and** membrane switches (Par. 33).

7. In regards to **claim 4**, Locke discloses wherein the or each detector **means 21** defines a sensing region on said casing 12/14 (Par. 33).

8. In regards to **claims 5 and 6**, Locke discloses wherein the or each detector **means 21** comprises a proximity detector or a contact detector (i.e. capacitive sensor), (Par. 33).

9. In regards to **claims 8 and 11**, Locke discloses wherein said first state is an Off state and wherein said second state is an On state (Par. 33-34).

10. In regards to **claim 14**, Locke discloses wherein, following detection of an operator, the control system 22 is operable to change the operational status of the

device to a different state if no further detection is detected within a preset period (Par. 34).

11. In regards to **claim 15**, Locke discloses means for issuing instructions (i.e. user interface 29) to an operator following detection by said detector means 21 (Par. 20).

12. In regards to **claim 16**, Locke discloses wherein said means for issuing instructions 29 comprises at least one of a loudspeaker 17 or a display 18 on the defibrillator device (Par. 20).

13. In regards to **claim 18**, Locke discloses wherein the control system 22 is operable to issue an instruction for the operator to touch or trip a further sensor (i.e. shock key 19) on detecting absence of the operator (e.g. lack of a keypress) following said change from said first operational state to said second operational state (Par. 24; Fig. 2).

14. In regards to **claim 19**, Locke discloses one or more attitude sensors (i.e. sensor switch 72) for detecting **the attitude** (i.e. orientation or position) of the casing (i.e. lid 64) and for supplying the corresponding attitude signals to said control system 22 (Par. 40; Fig. 3).

Claim Rejections - 35 USC § 103

15. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:**

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. **Claims 7, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke in view of Nova et al. (US 6,334,070), hereinafter Nova.**

18. In regards to **claim 7**, Locke discloses the device of claim 1, but fails to explicitly disclose wherein said control system 22 is operable on sustained detectors of an operator to change the operational states of said defibrillator device from said second state to a different state. Attention is directed towards the secondary reference of Nova, which discloses an automated external defibrillator (AED 10) wherein the rescuer merely presses the start button 12 and holds it for a predetermined time to power off the AED 10 (Col. 8, Lines 42-46; Fig. 1A). Locke and Nova are concerned with the same field of endeavor, namely the design of systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Locke to be operable to change the operational state of an AED from one state to another (i.e. On to Off) by utilizing sustained interaction with a sensor detecting the presence of an operator, as taught by Nova, in order to provide a means for utilizing the same detector for changing between various AED operational states.

19. In regards to **claim 13**, claimed subject matter is substantially similar in scope to matter rejected earlier in claim 7 above; therefore claim 7 is rejected for at least the same reasons by Locke and Nova.

20. In regards to **claim 17**, Nova discloses wherein the control system 22 (and Nova's microprocessor 24) is operable to issue an instruction to the operator (i.e. Fig. 10H) to connect a further item of equipment (i.e. electrodes), on detecting absence of an operator (i.e. lack of placement or connection of electrodes on patient) following the change from said first operational state to a second operational state (Col. 11, Lines 5-26; Fig. 7 and 10H).

21. **Claims 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke in view of Olsen et al. (US 5,897,576), hereinafter Olsen.**

22. In regards to **claim 9**, Locke discloses the device of claim 1 except wherein said first state is a quiescent or sleep state. Attention is directed towards the secondary reference of Olsen, which discloses an AED 10 wherein when the lid 28 is closed and the AED 10 not in use, the AED 10 is in a first state of stand-by mode (i.e. sleep state). Olsen also discloses a second AED state, rescue mode (i.e. On-state), is initiated when an operator opens lid 28 (Col. 3, Lines 14-17; Col. 4, Lines 32-33). Locke and Olsen are concerned with the same field of endeavor, namely the design of systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Locke wherein an AED's first state is a sleep state, as taught by Olsen, in order for the AED to be ready at a moment's notice in an emergency and perform self-tests while not in use.

23. In regards to **claim 10**, Olsen discloses wherein said control system is operational periodically to initiate a self-check routine during said sleep state (Col. 6, Lines 17-63).

24. In regards to **claim 12**, Olsen discloses wherein said second state (i.e. rescue mode) is a self-test state in which said control system initiates a self-test routine (i.e. lid opened self-test), (Col. 4, Lines 32-50).

25. **Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke in view of Miller et al. (US 6,397,104), hereinafter Miller.**

26. In regards to **claim 20**, Locke discloses the device of claim 1 except wherein after application of a defibrillation voltage in use to a patient, detection by said detector means of the presence or absence of operator causes the device to provide and/or store post-rescue data. Attention is directed towards the secondary reference of Miller, which discloses an AED system 8 comprising a defibrillator 10 and a supply module 14, wherein the defibrillator contains memory 56 and supply module contains local data storage memory 38. Miller also discloses after delivery of treatment shocks, the system 8 detects user presence by "mark" button 52/54, which causes the device to store post-rescue data (i.e. ECG data sensed during and after treatment with delivery shocks, audio input from a microphone 62, etc.), (Col. 3, Lines 44-58; Col. 4, Lines 25-40; Col. 6, Line 4 – Col. 7, Line 37; Fig. 1-4). Locke and Miller are concerned with the same field of endeavor, namely the design of systems and methods for AEDs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Locke to be operable to store post-rescue data after application of a defibrillation

voltage to a patient and as a result of the detection of the presence of an operator, as taught by Miller, in order to enable the AED operator to control and store rescue data within the system for later analysis and evaluation.

27. In regards to **claim 21**, Miller disclose wherein the defibrillator device includes means for storing data (i.e. memory 56 and 38 for storing an audio recording of the rescue) relating to **[the operation of the device, wherein detection by]** detector means of the presence or absence of operator causes the device to provide and/or store post-rescue data (Col. 6, Lines 25-41).

28. In regards to **claim 22**, Miller discloses wherein the defibrillator device includes means for storing data relating to the operation of the device (i.e. memory 56 and 38 for storing an audio recording of the rescue) following the application of a defibrillation voltage to a patient, and said control system is responsive to a signal from said detector means to apply a compression algorithm to said stored data (Col. 6, Lines 25-41).

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Hansen et al. (US 2006/0116723); Joo et al. (US 6,440,082); Matos (US 2003/0233129).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremiah T. Kimball whose telephone number is (571)270-7029. The examiner can normally be reached on 8am-6:30pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on 571-272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/
Supervisory Patent Examiner, Art Unit 3766

/J. T. K./
Examiner, Art Unit 3766
May 22, 2009